

WHAT IS CLAIMED IS:

1. A remote-control system including a mobile radio-signal terminal, a data server, and a network allowing said mobile radio-signal terminal and said data
5 server to communicate with each other therethrough,

wherein said mobile radio-signal terminal includes:

(a) a memory storing a plurality of remote-control codes therein;

(b) a signal transmitter which transmits a first remote-control signal to a target device, based on a remote-control code selected among said remote-control
10 codes for causing said target device to carry out a desired operation;

(c) a signal receiver which receives a second remote-control signal indicative of a certain operation, from a terminal which remote-controls said target device; and

(d) a controller which (d1) determines a remote-control code, based on said
15 second remote-control signal having been received by said signal receiver, (d2) receives a set of remote-control codes from said data server, and (d3) stores the thus received set of remote-control codes in said memory as said plurality of remote-control codes, and

wherein said data server receives said second remote-control signal, and
20 transmits said set of remote-control codes associated with said target device and selected in accordance with said second remote-control signal, to said mobile radio-signal terminal.

2. The remote-control system as set forth in claim 1, wherein said set of
25 remote-control codes include at least a category and a manufacturer of said target device.

3. The remote-control system as set forth in claim 1, wherein said controller further includes a sampler which samples said second remote-control signal

having been received by said signal receiver, and determines a remote-control code, based on the thus sampled second remote-control signal.

4. The remote-control system as set forth in claim 1, wherein said controller
5 includes a signal producer which produces said first remote-control signal, based on said remote-control code having been read out of said memory.

5. The remote-control system as set forth in claim 1, wherein said mobile
radio-signal terminal is comprised of a cellular phone.

10

6. The remote-control system as set forth in claim 1, wherein each of said first and second remote-control signals is comprised of infra-red rays, said signal transmitter is comprised of an infra-red ray irradiator, and said signal receiver is comprised of an infra-red ray receiver.

15

7. A mobile radio-signal terminal having a function of making radio-signal communication with another radio-signal terminal through a network, including:

(a) a signal transmitter which transmits a first remote-control signal to a target device for remote-controlling said target device;

20 (b) a signal receiver which receives a second remote-control signal indicative of a certain operation, from a terminal which remote-controls said target device;

(c) a controller which obtains a remote-control code determined, based on said second remote-control signal having been received by said signal receiver;

(d) a radio-signal transceiver which transmits said remote-control code to a
25 data server through said network, and receives a set of remote-control codes used for remote-controlling said target device, from said data server through said network; and

(e) a memory storing said set of remote-control codes having been received by said radio-signal transceiver,

wherein said controller reads a remote-control code out of said memory for causing said target device to carry out a desired operation, transmits the thus read-out remote-control code to said signal transmitter, and causes said signal transmitter to produce said first remote-control signal.

5

8. The mobile radio-signal terminal as set forth in claim 7, wherein said set of remote-control codes include at least a category and a manufacturer of said target device.

10

9. The mobile radio-signal terminal as set forth in claim 7, wherein said controller includes a sampler which samples said second remote-control signal having been received by said signal receiver, and determines a remote-control code, based on the thus sampled second remote-control signal.

15

10. The mobile radio-signal terminal as set forth in claim 7, wherein said mobile radio-signal terminal is comprised of a cellular phone.

20

11. The mobile radio-signal terminal as set forth in claim 7, wherein each of said first and second remote-control signals is comprised of infra-red rays, said signal transmitter is comprised of an infra-red ray irradiator, and said signal receiver is comprised of an infra-red ray receiver.

12. A method of storing remote-control data used for remote-controlling a target device, comprising the steps of:

25

(a) transmitting a remote-control signal to a mobile radio-signal terminal;

(b) transmitting said remote-control signal from said mobile radio-signal terminal to a data server;

(c) identifying a target device to be remote-controlled, based on said remote-control signal;

(d) identifying remote-control data used for remote-controlling said target device, among a plurality of remote-control stored in said data server;

(e) transmitting the thus identified remote-control data to said mobile radio-signal terminal; and

5 (f) storing said remote-control data in a memory equipped in said mobile radio-signal terminal.

13. The method as set forth in claim 12, wherein said step (a) is carried out by a user by actuating a predetermined key of a remote-controller used for
10 remote-controlling said target device.

14. The method as set forth in claim 12, further comprising the step of converting said remote-control signal into a digital signal, which is transmitted from said mobile radio-signal terminal to said data server.

15

15. The method as set forth in claim 12, wherein said target device is identified in said step (c) by identifying at least a category and a manufacturer of said target device.

20 16. The method as set forth in claim 12, wherein said remote-control signal is transmitted to said mobile radio-signal terminal in the form of infra-red ray in said step (a).

25 17. The method as set forth in claim 12, further comprising the step of transmitting said remote-control data from said mobile radio-signal terminal to said target device for remote-controlling said target device.

18. The method as set forth in claim 17, wherein said remote-control data is transmitted to said target device in the form of infra-red ray.

19. A program to be installed in a mobile radio-signal terminal for causing a controller to carry out a method of storing remote-control data used for remote-controlling a target device, steps executed by said controller in accordance
5 with said program including:

(a) receiving a remote-control signal from a remote-controller used for remote-controlling said target device;

(b) transmitting said remote-control signal to a data server;

(c) receiving remote-control data used for remote-controlling said target
10 device which remote-control data has been identified among a plurality of remote-control stored in said data server; and

(d) storing the thus received remote-control data in a memory equipped in said mobile radio-signal terminal.

15 20. The program as set forth in claim 19, wherein said steps further include the step of converting said remote-control signal into a digital signal, which is transmitted to said data server.

20 21. The program as set forth in claim 19, wherein said steps further include the step of transmitting said remote-control data to said target device for remote-controlling said target device.

22. The program as set forth in claim 19, wherein said remote-control data is transmitted to said target device in the form of infra-red ray.

25